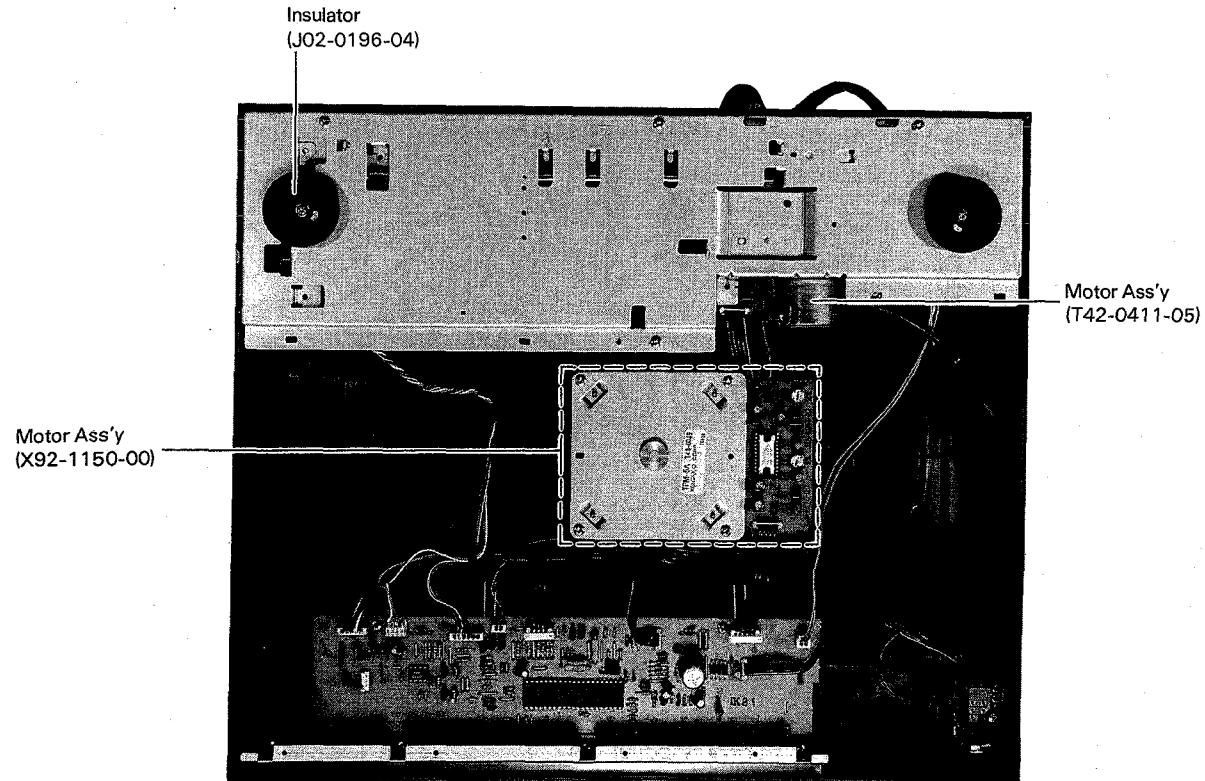
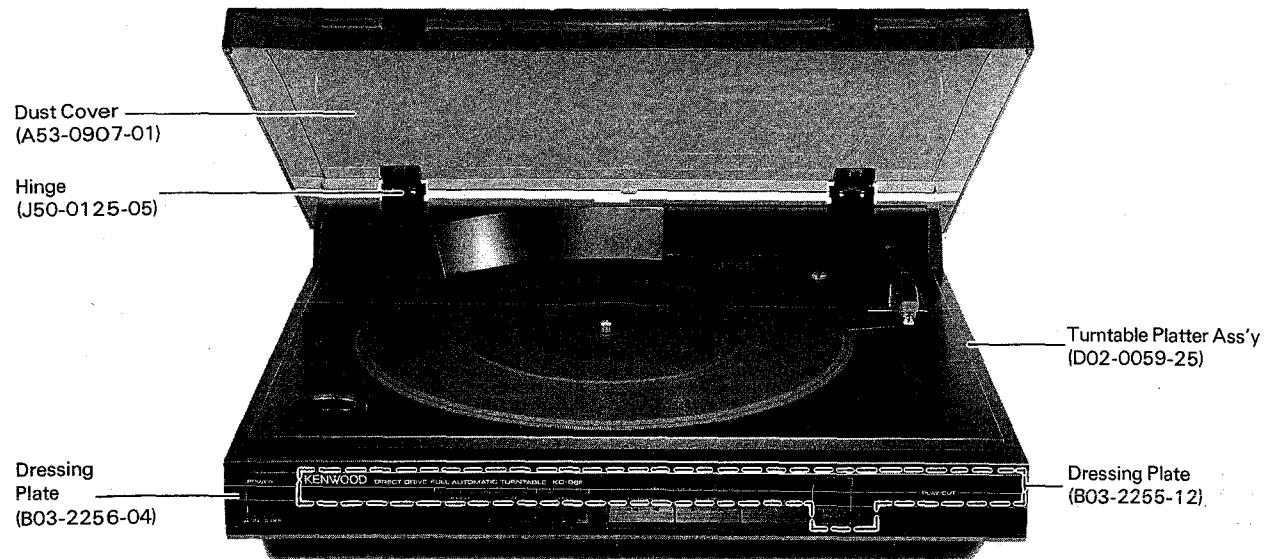


COMPUTER CONTROLLED TURNTABLE  
**KD-66F**  
SERVICE MANUAL

**KENWOOD**

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B51-3211-00(B)2347

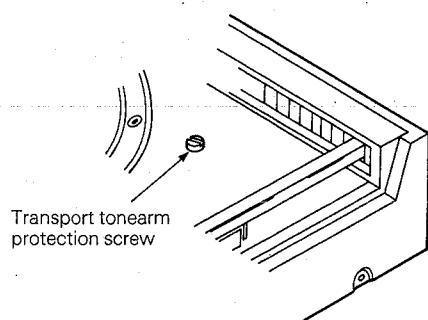


## OPERATION DESCRIPTION

**Transport tonearm protection screw**

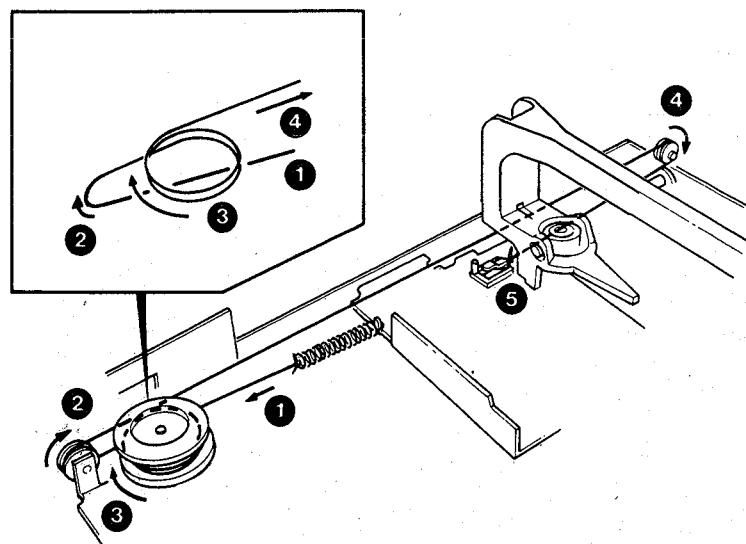
Remove the transport tonearm protection screw for shipping on the top of the unit.

Remove the transport tonearm protection screw (red) using a coin etc. After removing, keep the screw for future moving.

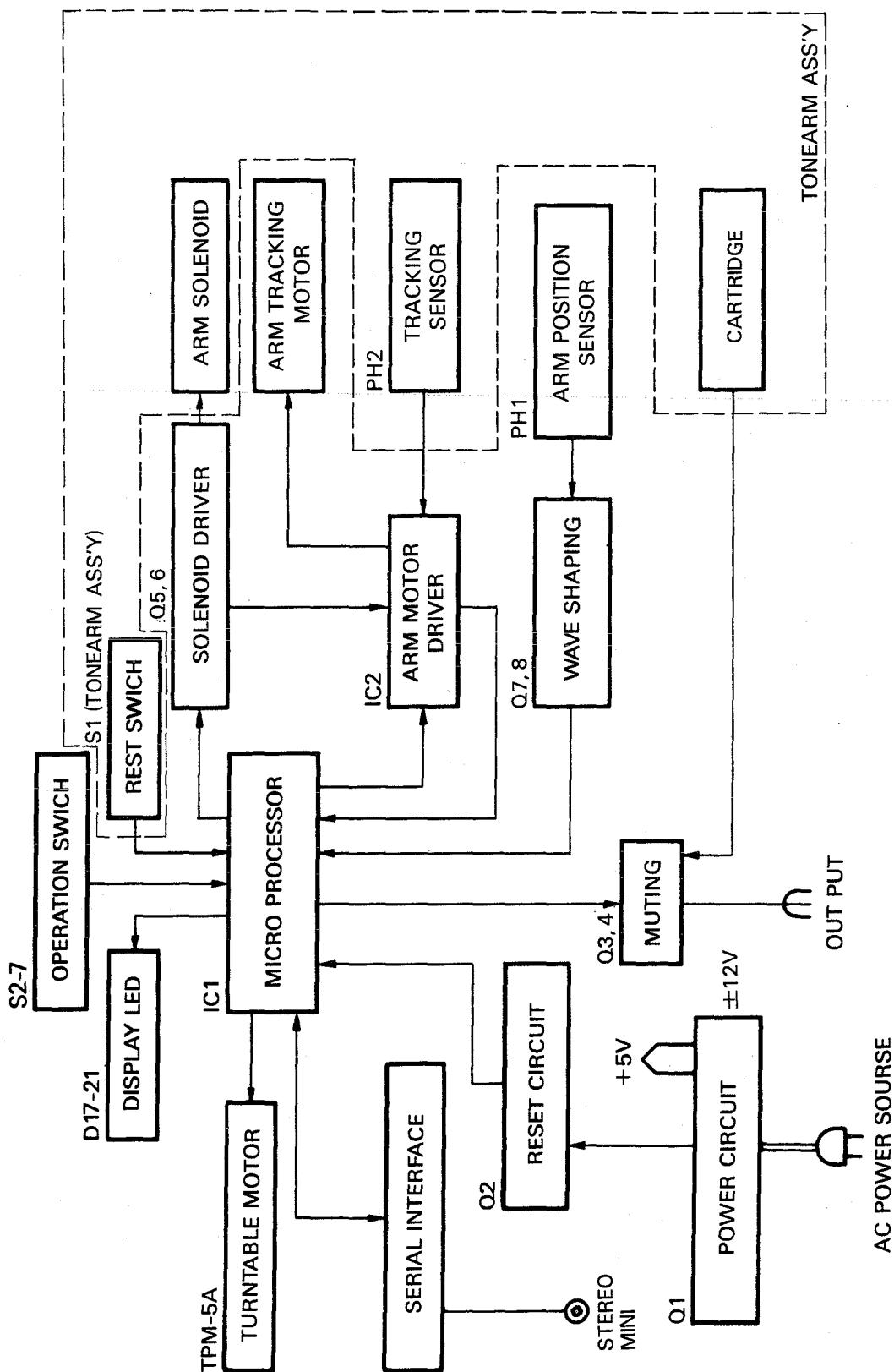
**DIAL CORD STRINGING**

1. Tie the cord to the spring and hook the spring to the projection of the holder (1).
2. Hook the cord to pulley (2) from lower side and then move it in the direction shows arrow to hook to the pulley (3).

3. Wind the cord twice around the pulley (3) from lower side and hook the cord to the pulley (4) from upper side.
4. Hook the loop of the cord to the holder (5).



## BLOCK DIAGRAM



## CIRCUIT DESCRIPTION

### LISTS OF DEVICE FUNCTIONS

#### Electric unit (X25-2940-00)

Device	Application/function	Operation/condition/compatibility
IC1	Logic control	Refer to separate section.
IC2	Linear tracking motor control	Linear tracking servo-control, and generation of FOR and REV output voltages.
Q1	Regulated power supply	Control transistor for 5 V
Q2	For reset signal	When 5 V power turns ON, becomes "L" to output reset signal.
Q3, 4	Muting	Cancels muting only when arm is down.
Q5	Plunger drive	While arm is down, turns ON to hold plunger.
Q6	Plunger drive	When arm is down, turns ON for 800 msec to pull-in the plunger.
Q7, 8	Schmitt circuit	Forms a Schmitt circuit which shapes the output from the rotary encoder (arm position detection).
Q9~12	Current booster	Current drive of linear tracking motor.
Q13	Angle sensor output ON/OFF	Functions to prevent the angle sensor from operating when the arm is up.
PH1	Rotary encoder	Detects arm position.
PH2	Rotary encoder	Detects arm angle.

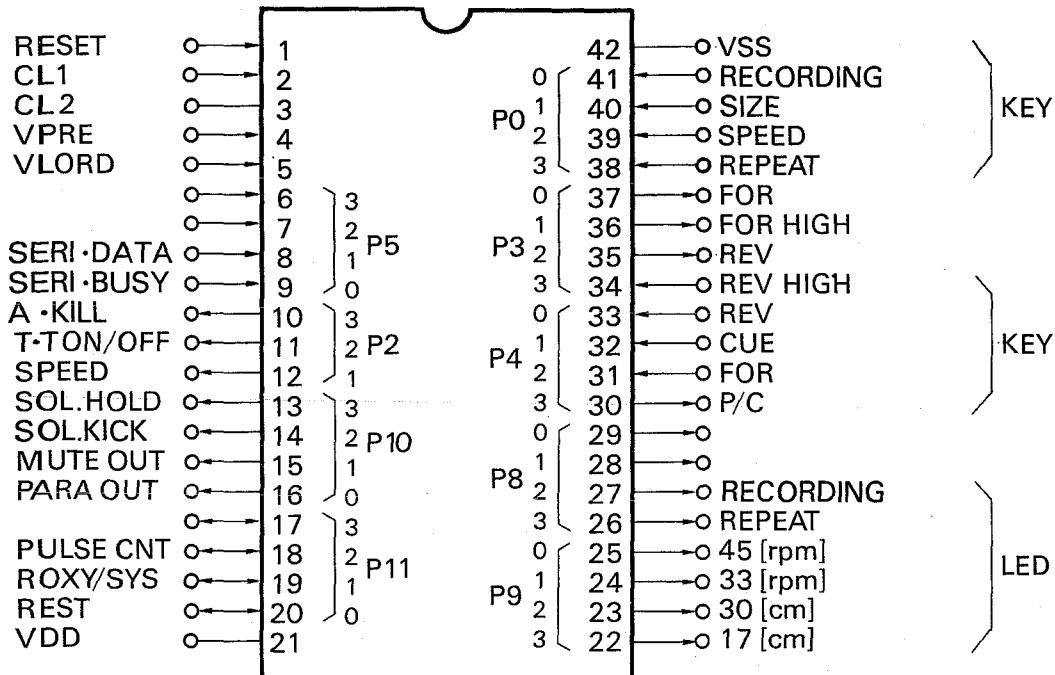
#### Control unit (X29-1770-00)

Device	Application/function	Operation/condition/compatibility
IC1	Motor driver	2-phase full-wave. F-servo motor driver.
Q1	Motor stop	At ON, motor stops, and at OFF runs.
Q2	Speed selection	At OFF, 33-1/3 RPM. At ON, 45 RPM.
H1, 2	Position detection	Detects rotor magnet position to change coil current.

# CIRCUIT DESCRIPTION

Description of port function: IC1 ( $\mu$ PD7537AC-014)

## Port layout



Port Assignment Table (1)

Port	Pin No.	I/O Mode	Active Mode	Function
P0	0 41	I	H	REC Key Input
	1 40	I	H	SIZE Key Input
	2 39	I	H	SPEED Key Input
	3 38	I	H	REPEAT Key Input
P2	1 12	O	H	T.T Motor Speed 33 [rpm]
		L		T.T Motor Speed 44 [rpm]
	2 11	O	H	T.T Motor Stop
		L		T.T Motor Start
P3	3 10	O	H	Tracking Sense Amp Kill Signal
	0 37	O	H	Tonearm Drive Motor Control Signal FOR
	1 36	O	H	Tonearm Drive Motor Control Signal FOR H
	2 35	O	H	Tonearm Drive Motor Control Signal REV
P4	3 34	O	H	Tonearm Drive Motor Control Signal REV H
	0 33	I	H	REV Key Input
	1 32	I	H	CUE Key Input
	2 31	I	H	FOR Key Input
P5	3 30	I	H	PLAY/CUT Key Input
	0 9	I/O	H	Serial Signal BUSY
	1 8	I/O	H	Serial Signal DATA
	2 7	—	—	Unused
	3 6	—	—	Unused

Port Assignment Table (2)

Port	Pin No.	I/O Mode	Active Mode	Function
P9	0 25	O	H	45 [Speed] Indication
	1 24	O	H	33-1/3 [Speed] Indication
	2 23	O	H	30 [cm] Indication
	3 22	O	H	17 [cm] Indication
P10	0 16	O	H	Parallel Output
	1 15	O	L	MUTING
	2 14	O	H	Solenoid ON Kick Signal
P11	3 13	O	H	Solenoid OFF Hold Signal
	0 20	I	H	Reset Signal
	1 19	I	H	SYSCON Mode
		L		ROXY Mode
RESET	2 18	I	—	Arm Drive Section Photointerruptor (pulse count)
	3 17	—	—	Unused
	1 1	I	H	Reset Signal
CL-1	2	—	—	Clock
CL-2	3	—	—	Clock
VPRE	4	—	—	Unused (GND)
VLOAD	5	—	—	Unused (GND)
VDD	21	—	—	Power Input pin (5 V)
VSS	21	—	—	GND

Port Assignment Table (3)

Port	Pin No.	I/O Mode	Active Mode	Function
P8	0 29	—	—	Unused
	1 28	—	—	Unused
	2 27	O	H	Recording Indication
	3 26	O	H	Repeat Indication

## CIRCUIT DESCRIPTION

Operation Timing Diagram (1)

Mode change Port	STOP→FORWARD (manual)	STOP→FORWARD (auto)	STOP→REVERSE (manual)	STOP→REVERSE (auto)
FWD				
HI FWD				
REV				
HI REV				
A·KILL				
SOLENOID				
KICK				
MUTING				
T·T				

Mode change Port	DOWN→FORWARD (manual)	DOWN→REVERSE (manual)	DOWN→REVERSE (auto)	
FWD				
HI FWD				
REV				
HI REV				
A·KILL				
SOLENOID				
KICK				
MUTING				
T·T				

## CIRCUIT DESCRIPTION

Operation Timing Diagram (2)

Mode change Port	DOWN→STOP(UP)	FORWARD→REVERSE	REVERSE→FORWARD	STOP(UP)→DOWN
FWD				
HI FWD		0.5sec	2sec	
REV			0.5sec	
HI REV		2sec		
A·KILL				
SOLENOID	100msec			
KICK				1sec
MUTING				3.5sec
T·T				

Auto-play Operation

Mode change Port	REST	FOR	PLAY	REV	REST
FWD		1.5sec	0.5sec		
HI FWD					
REV				1.5sec	
HI REV					
A·KILL		8msec			
SOLENOID					
KICK			1sec		
MUTING			3.5sec	100msec	
T·T					

## CIRCUIT DESCRIPTION

OPERATIONAL DESCRIPTION  
BASIC OPERATIONAL DESCRIPTION

## 1. Automatic operation

## (a) Auto-play (auto lead-in)

When the record size is selected by the SIZE key and the PLAY/CUT key is pressed after the record is loaded with the tonearm on the armrest, the speed is automatically set in response to the size selector and then playback starts at the first tune of that record.

When the turntable rotates after the PLAT/CUT key is pressed, the tonearm starts moving about 1.5 sec later. When the tonearm starts moving, the tonearm is fed at high speed toward the left (FF) to the "lead-in count - 16" position and is fed at low speed toward the left (FOR) to the lead-in count position.

When playback terminates and the tonearm has reached the return position of the set record size, or when the speed detection indicates that the tonearm has reached the lead-out groove, the tonearm is automatically returned. At this time, when the repeat play mode is set, playback is automatically repeated up to 16 times.

## (b) Auto-cut

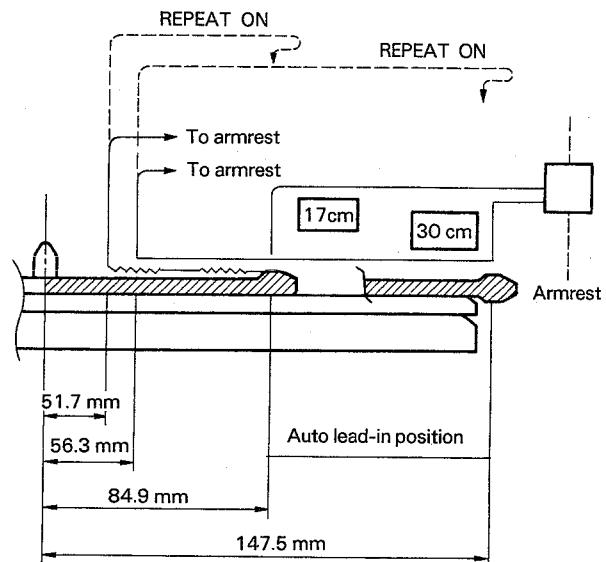
When the PLAY/CUT key is pressed with the tonearm at a location other than the armrest or during the auto-play mode, the auto-cut operation is engaged.

In this case, the number of play repetitions is canceled. The record size and speed settings made before playback remain, and do not change. In addition, during the auto-cut operation, all key operations are ignored.

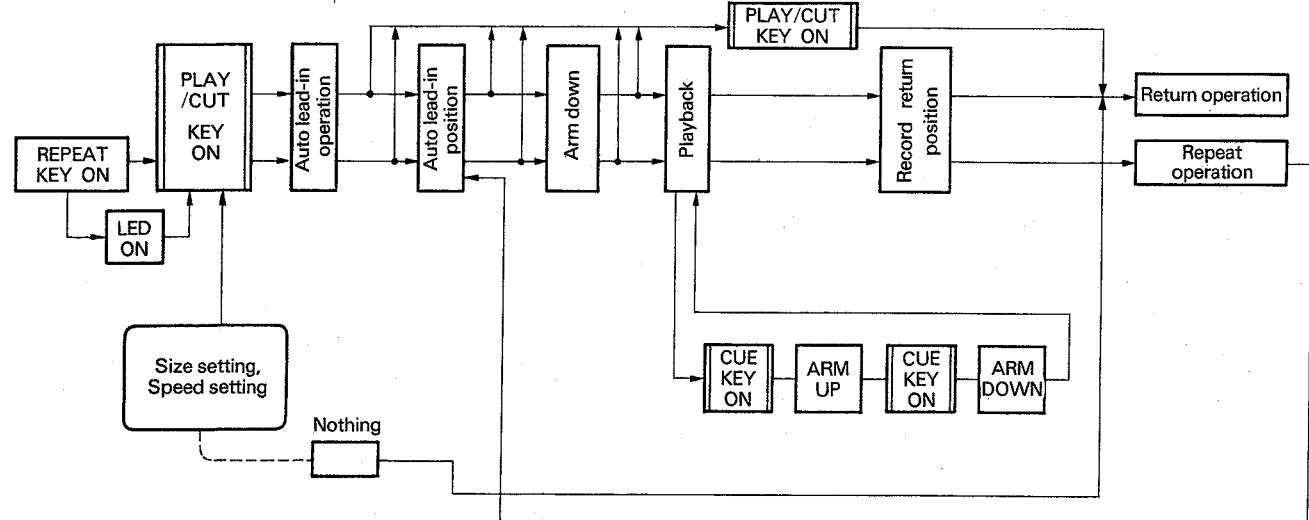
## (c) Auto-repeat (only in auto-play)

The combination of the PLAY and REPEAT keys permits the playback to return to the first tune and continue. During the auto-repeat operation, when the FOR or REV key is pressed, the auto-repeat mode is canceled.

During the auto-repeat operation, the tonearm after being returned, is fed at high speed toward the right (REW) to the position located 16 counts before the auto lead-in position, after which the tonearm is fed at low speed through the auto lead-in position once, then fed toward the left and lowered onto the auto lead-in position.



## Auto-play operation



(1) A 25-cm record or a non-standard record is handled by manual playback.

(2) This operation depends on the return position and record speed detection.

## CIRCUIT DESCRIPTION

### 2. Manual operation

During the automatic operation or when the tonearm is placed on the armrest, when the FOR or REV key is pressed, the manual operation is engaged.

In this case, the tonearm is fed at low speed for 2 sec, after the FOR or REV key is pressed ON, after which it is fed at high speed.

### 3. Record size selection

At power ON, when the PLAY/CUT key is pressed without setting the record size and a record is not on the platter (30 cm or 17 cm), the tonearm moves to the 17-cm lead-in position and is returned.

Thus, the tonearm is not lowered.

In addition, even when the CUE key is pressed in the manual operation, the tonearm is not lowered and is returned.

Until the record size is set, the size indicator LEDs flicker alternately (in intervals of about 1 sec).

The SIZE and SPEED keys are electrically interlocked with each other. Thus, when the 30-cm record size is selected, the record speed is set at 33 RPM, while when the 17-cm record size is selected, the record speed is set at 45 RPM.

In addition, after the size setting, the tonearm lowers onto the lead-in position of the set record size.

(Safety function only at power ON)

### 4. Speed selection

Until the record size is set, the SPEED key is not accepted.

Although the SPEED key is electrically interlocked with the SIZE key, the SPEED key can be switched independently.

### 5. Cueing

In manual operation, the cueing permissible range is from the 30-cm lead-in position to the return position of the set record size.

### 6. Muting

Muting is canceled 3.5 sec after the tonearm lowered or 0.5 sec after input of the pulse count after the tonearm is lowered.

When the tonearm is rised, muting goes ON and then OFF 100 msec after by the plunger action

### 7. Others

- (a) In manual operation, the tonearm returns to the return position of the set record size (the 30-cm return position when the 30-cm record size is set).
- (b) Except the FOR and REV keys, every key pressed first is given priority. When another key is ON, all other keys are ignored. Therefore, other keys are not accepted unless the originally pressed key is turned OFF.
- (c) Only the FOR or REV key is effective except during the auto-cut operation irrespective of any other key ON/OFF.
- (d) Double pressure on the FOR or REV key causes stoppage of the turntable.

### System Configuration for KD-66F for Serial Connection.

- (a) When the function selector of the amplifier is set at "PHONO", the turntable enters the auto-play operation.
- (b) When the function selector of the amplifier is changed to another position from "PHONO", the turntable enters the auto-return operation.
- (c) When the tonearm is lowered by pressing the PLAY/CUT key, the function selector of the amplifier is changed to "PHONO".
- (d) When roulette play is started on the turntable, the turntable enters the auto-return operation. Any key other than the SIZE and SPEED keys is not accepted until roulette play is canceled.
- (e) In case of (b), when cassette deck A or B is in the "PHONO REC" mode, the auto-return operation is not performed.
- (f) When the system is in roulette play, and the power of the turntable is turned ON, roulette play is canceled 1 sec later.

## CIRCUIT DESCRIPTION

## DESCRIPTION OF CIRCUIT OPERATION

## Used board No.: X25-2940-00

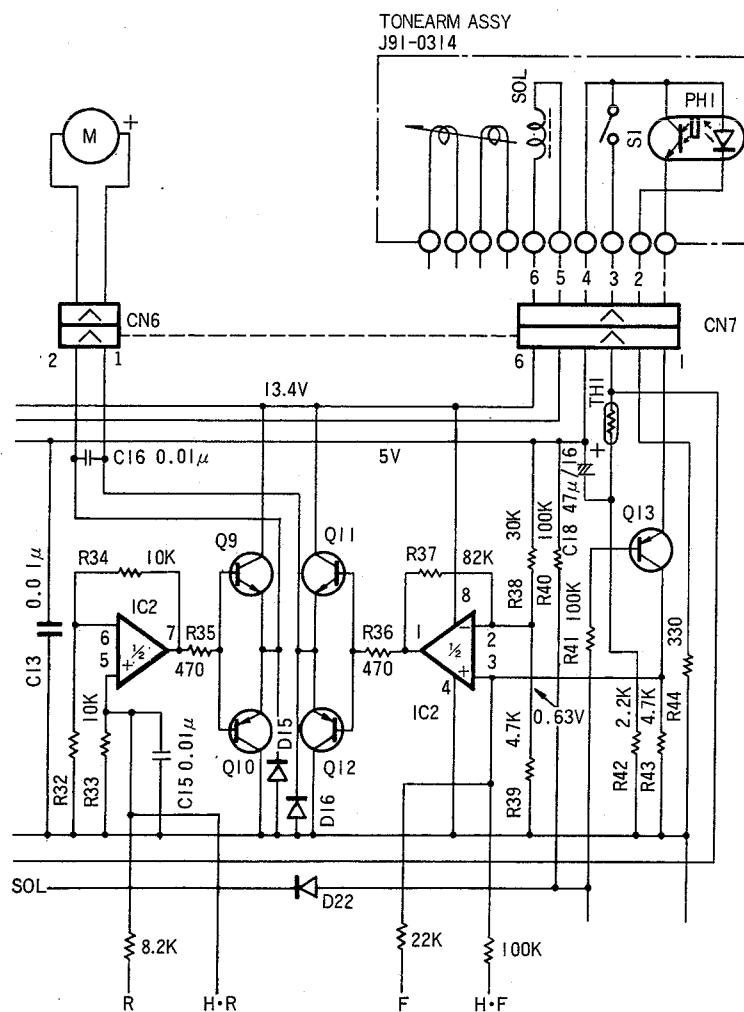
## Linear tracking motor control circuit: Used board No. X25-2940-00

As the plunger is at the OFF position when the arm is up, the solenoid output is 13.4 V. Thus, D22 is subject to reverse bias, and 5 V is applied to Q13 by way of R40 and R41. Thereby, Q13 turns OFF so that the sensor output is not supplied to pin 3 of IC2.

When the arm is lowered, the solenoid output becomes 0 V and a current flows via R41 so that Q13 turns ON. When Q13 turns ON, the sensor output is entered to IC2, in which it is then amplified to 26 dB and applied to the current booster consisting of Q11 and Q12. This current-boosted output is applied to the DC motor to move the arm in the forward direction.

When the F output becomes "H", the output resulting from the split by a 22 k-ohms resistor and R43 is applied to IC2 so that the arm moves at slow speed in the forward direction. When F and HF both become "H", the split voltage becomes higher due to the 22 k-ohms and 100 k-ohms resistors connected in parallel so that the arm moves at high speed in the forward direction.

Subsequently, when R becomes "H", the output resulting from the split by a 8.2 k-ohms resistor and R33 is applied to IC2 so that the arm moves at slow speed in the reverse direction. When H and R become "H", the output is not subject to the split by the resistors so that the arm moves at high speed in the reverse direction.



## CIRCUIT DESCRIPTION

### Introduction

The TPM-5 is smaller in size than the TPM-2 through employment of a 2-phase full-wave F-servo 1-chip motor driver TA7284P and through transition of resistor jumpers into a chip. Furthermore, the TPM-2 uses a push-pull drive, and the TPM-5 uses a BTL drive owing to the TA7284P, thus enabling transition to a single power supply.

### Circuit description

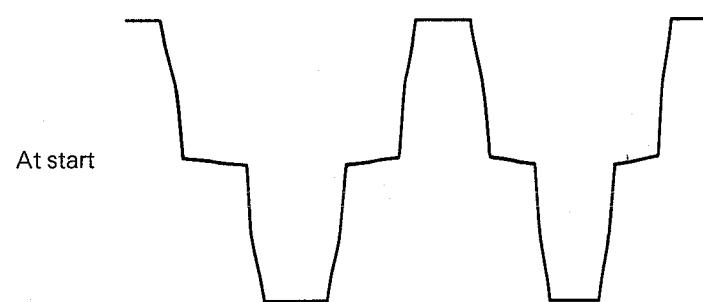
Signal detected by the FG coil is amplified by the FG amplifier and then input to the Schmitt circuit. The sampling and reset pulses required for the sample-hold operation are generated from the waveform-shaped output. Then, a triangular wave (pin 6) is generated from this control output, and that peak value is held at C5.

This hold voltage is compared with the reference voltage  $V_{rf}$ , and that error signal is amplified by amplifier 2. Moreover, the output of amplifier 2 is phase-inverted by amplifier 3 and input to the position detection circuit by way of the amplifier 4.

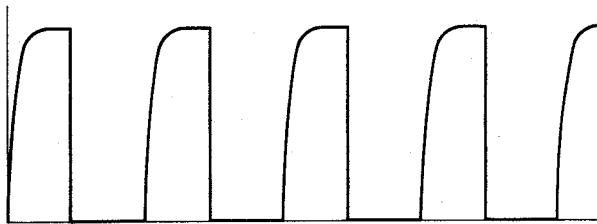
Then, the FG coil which detected by means of a Hall element, and the flow is the current corresponding to that output, to drive the magnet. The coil current is detected by R10 and R11 and is fed back to amplifier 4 so that the coil current is controlled.

When the voltage drops of R10 and R11 becomes 0.6 V, the protective circuit functions to prevent the flow of overcurrent.

Waveform across coil



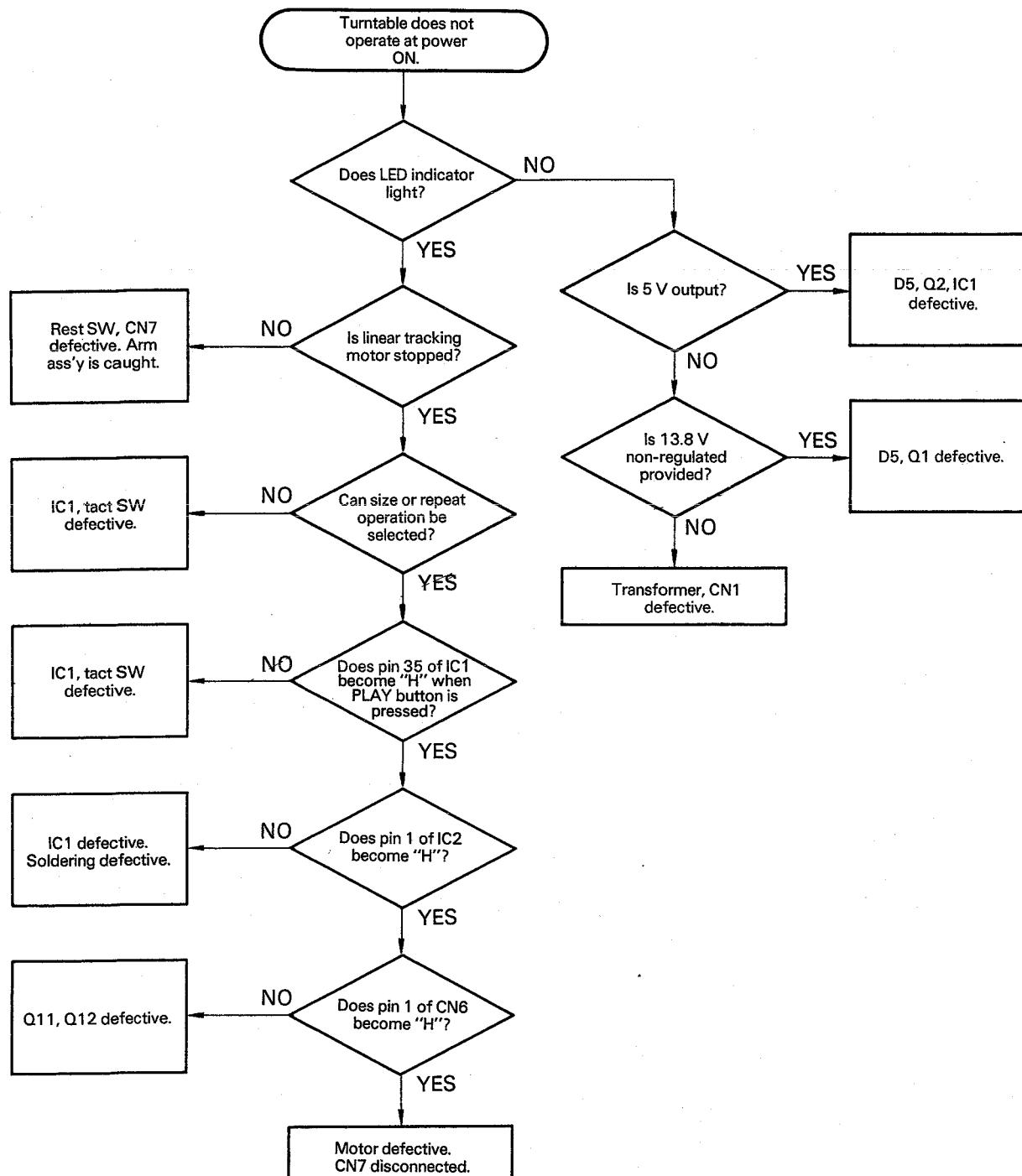
Waveform at pin 15



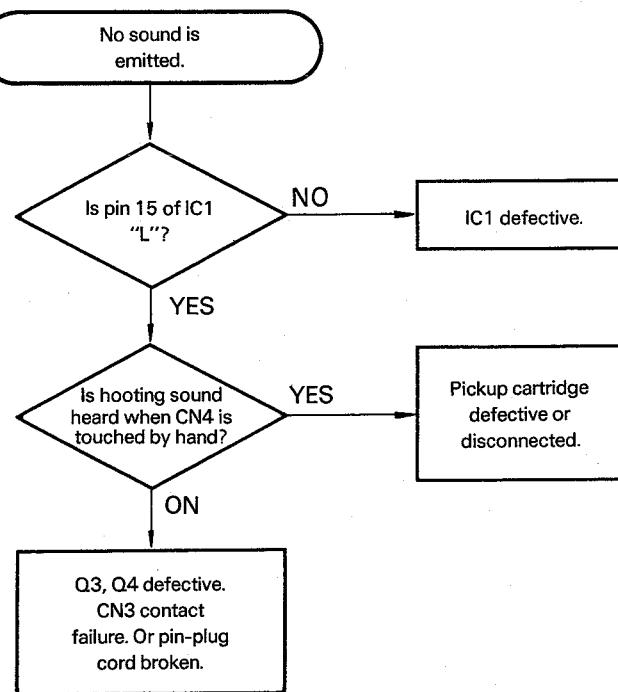
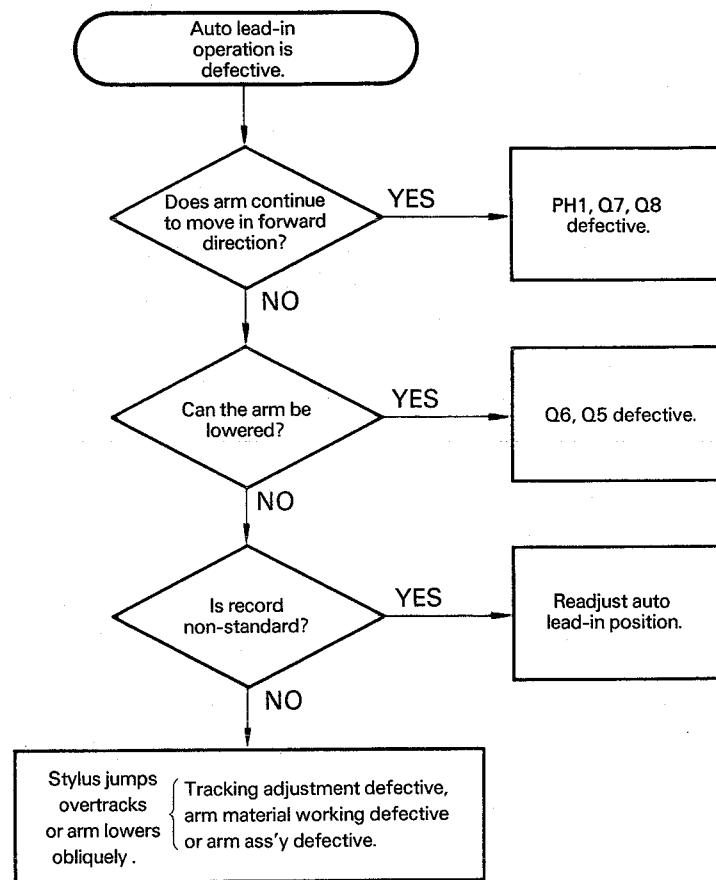
Waveform at pin 6

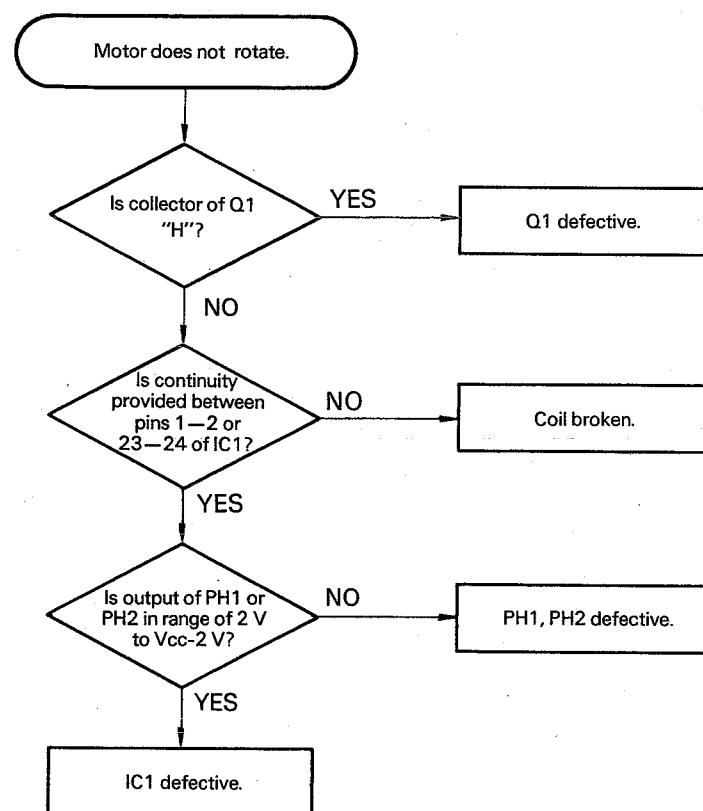


## TROUBLE SHOOTING



## TROUBLE SHOOTING



**TROUBLE SHOOTING**

When the desired performance is not obtained, replace the motor ass'y entirely.

## ADJUSTMENT/REGLAGE

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	PLAYER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
1	ARM RIGHT- ANGLE	—	—	—	Arm centering screw (screw lock with adhesive)	At right angles with mechanism ass'y	2
2	STYLUS HEIGHT	—	—	• Reset position • Detach platter.	Height adjustment screw (screw lock with adhesive)	4~5mm from record surface	1
3	TRACKING	Short between test pins A and C.	Connect tester between test pins B and C.	Keep arm up.	Eccentric cam (PC board lock with adhesive)	0.4~0.45V	2
4	AUTO LEAD-IN	Test record	Connect to amplifier unit.	Achieve automatic arm led in to 30cm position.	Auto lead-in adjustment screw (screw lock with adhesive)	20±10 count	1

\*Note: When performing an adjustment from the way of this sequence, be sure to perform the succeeding adjustment(s) again.

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DE LA LECTURE	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
1	L'ANGLE DROIT DU BRAS	—	—	—	Vis de centrage du bras (verrouillage de vis avec adhésif)	À angles droits avec l'assemblage du mécanisme	2
2	HAUTEUR DE LA POINTE DE LECTURE	—	—	• Position de remise à zéro • Détacher le plateau.	Vis d'ajustement de la hauteur (verrouillage de vis avec adhésif)	4~5mm de la surface du disque	1
3	D'ALIGNEMENT	Court-circuiter entre les broches-test A et C.	Raccorder le testeur entre les broches-test B et C.	Garder le bras soulevé.	Came excentrée (verrouillage de plaque de circuit imprimé avec adhésif)	0.4~0.45V	2
4	D'ENTREE AUTOMATIQUE	Mettre en place le disque-test.	Raccorder à l'amplificateur.	Effectuer l'entrée de bras automatique à la positoin 30cm.	Vis d'ajustement d'entrée automatique (verrouillage de vis avec adhésif)	Comptage 20±10	1

\*Remarque: Lors de l'exécution d'un ajustement en cours de séquence, toujours réeffectuer les ajustements qui suivent.

Height adjustment screw

Vis d'ajustement de hauteur

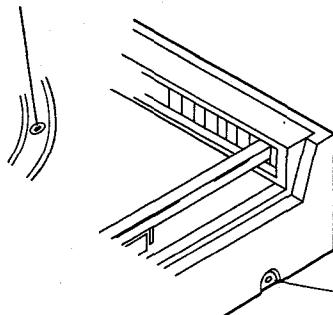


Fig. 1

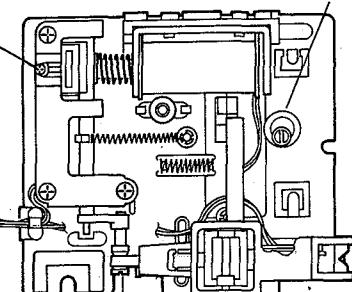
Height adjustment screw  
Vis d'ajustement de la hauteurEccentric cam  
Came excentrée

Fig. 2

Arm centering screw  
Vis de centrage du brasAuto lead-in adjustment screw  
Vis d'ajustement d'entrée automatique

## ABGLEICH

NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	SPIELER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
1	EINSTELLUNG TONARM AUF RECHTEN WINKEL	—	—	—	Tonarm-Zentrierungsschraube (Schraube mit Klebemittel gesichert)	Auf rechten Winkel mit Mechanismus-Baugruppe	2
2	NADELHÖHE	—	—	• Rückstellposition • Plattenteller abnehmen	Höhen-Einstellschraube (Schraube mit Klebemittel gesichert)	4~5mm von Plattenoberfläche	1
3	SPURWINKEL	Teststifte A und C kurzschließen.	Prüfgerät zwischen Teststiften B und C anschließen.	Tonarm oben halten	Exzentrischer Nocken (Platine mit Klebemittel gesichert)	0,4~0,45V	2
4	EINLAUPRILLE	Testschallpaltte auflegen.	An Verstärker anschließen.	Automatische Tonarmzuführung in 30cm-Position herstellen.	Einlauftrille-Einstellschraube (Schraube mit Klebemittel gesichert)	20±10 Zählungen	1

\*Hinweis: Bei Durchführung einer Einstellung entsprechend der Einstell-Reihenfolge unbedingt die Einstellung überprüfen.

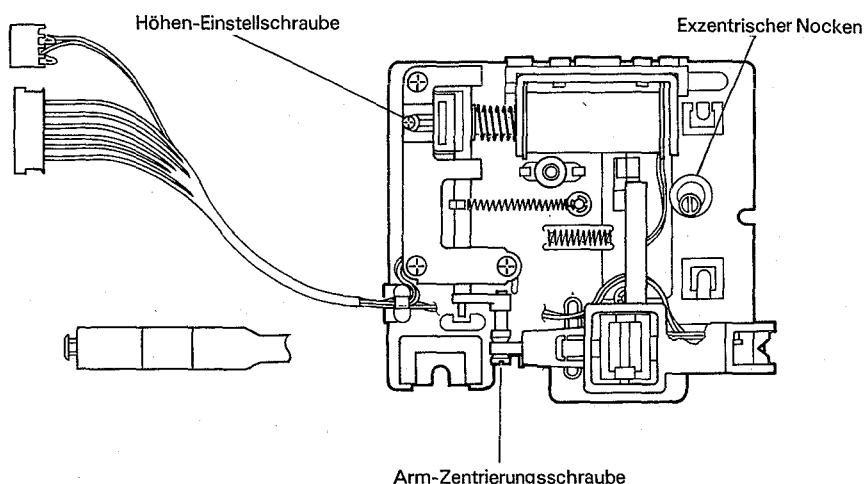


ABB. 2

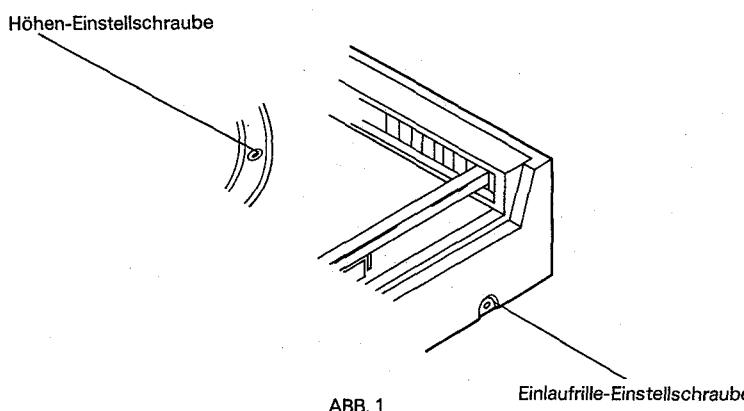
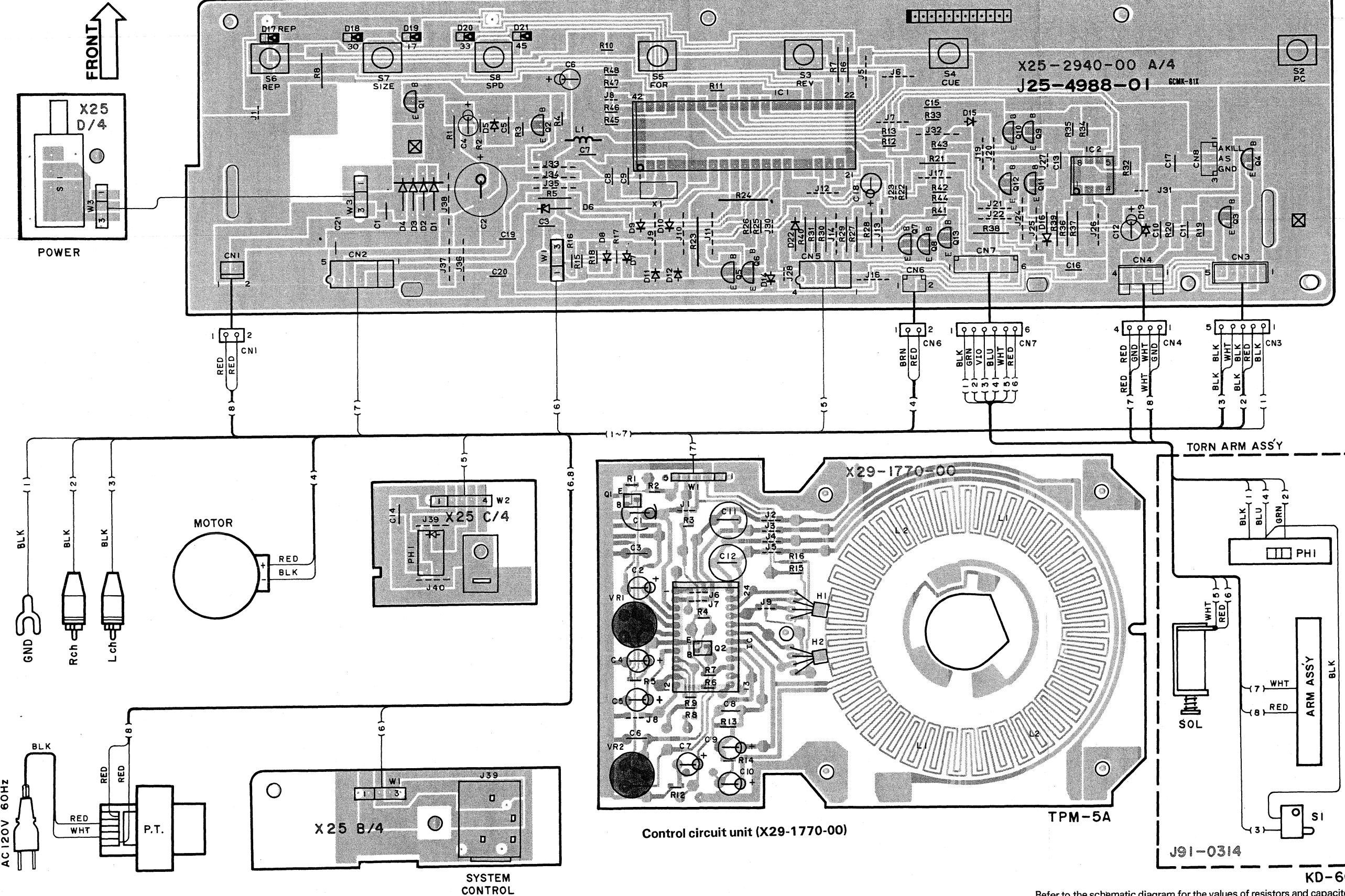


ABB. 1

### Electric unit (X25-2940-00)

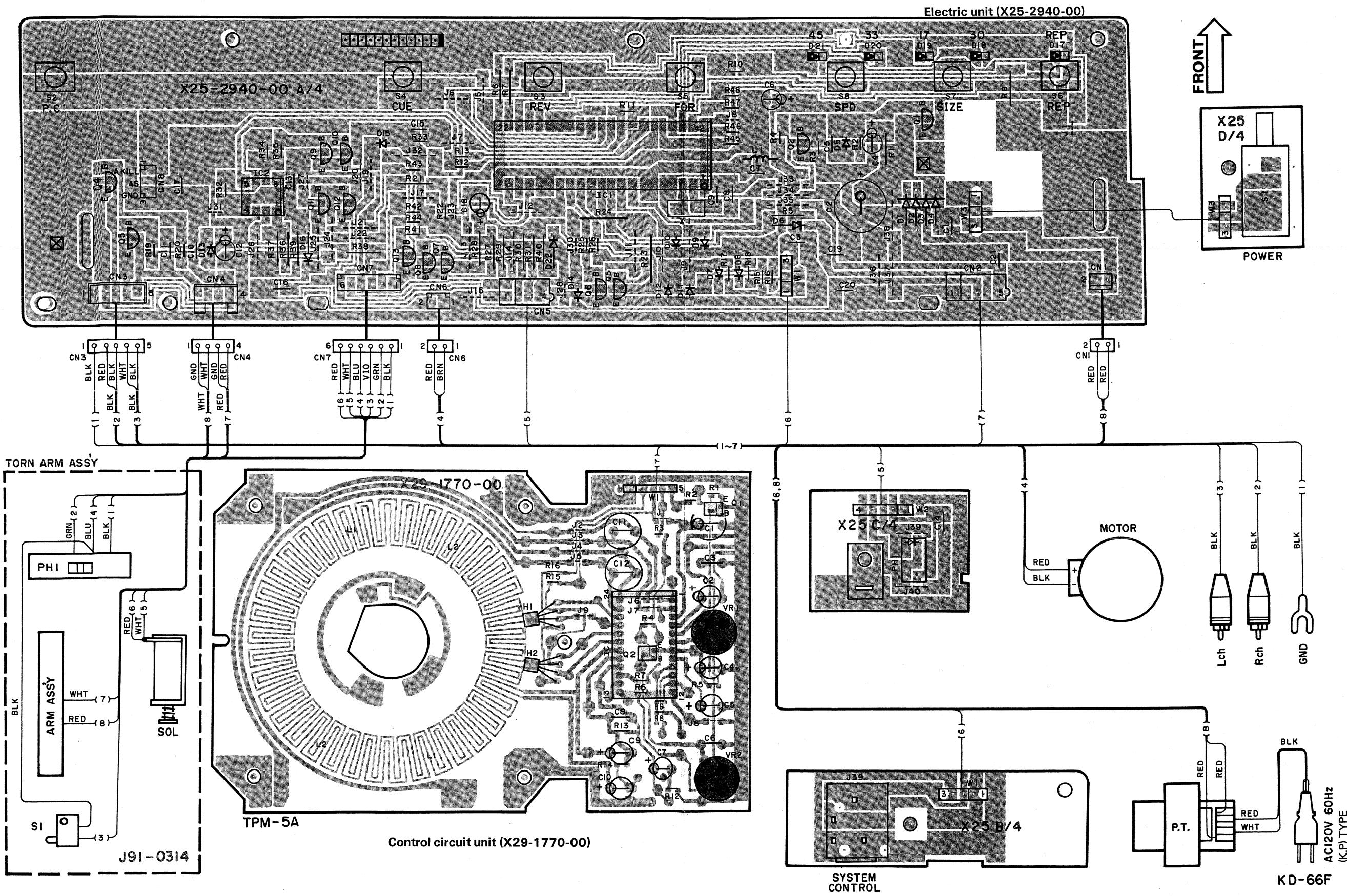


## Control circuit unit (X29-1770-00)

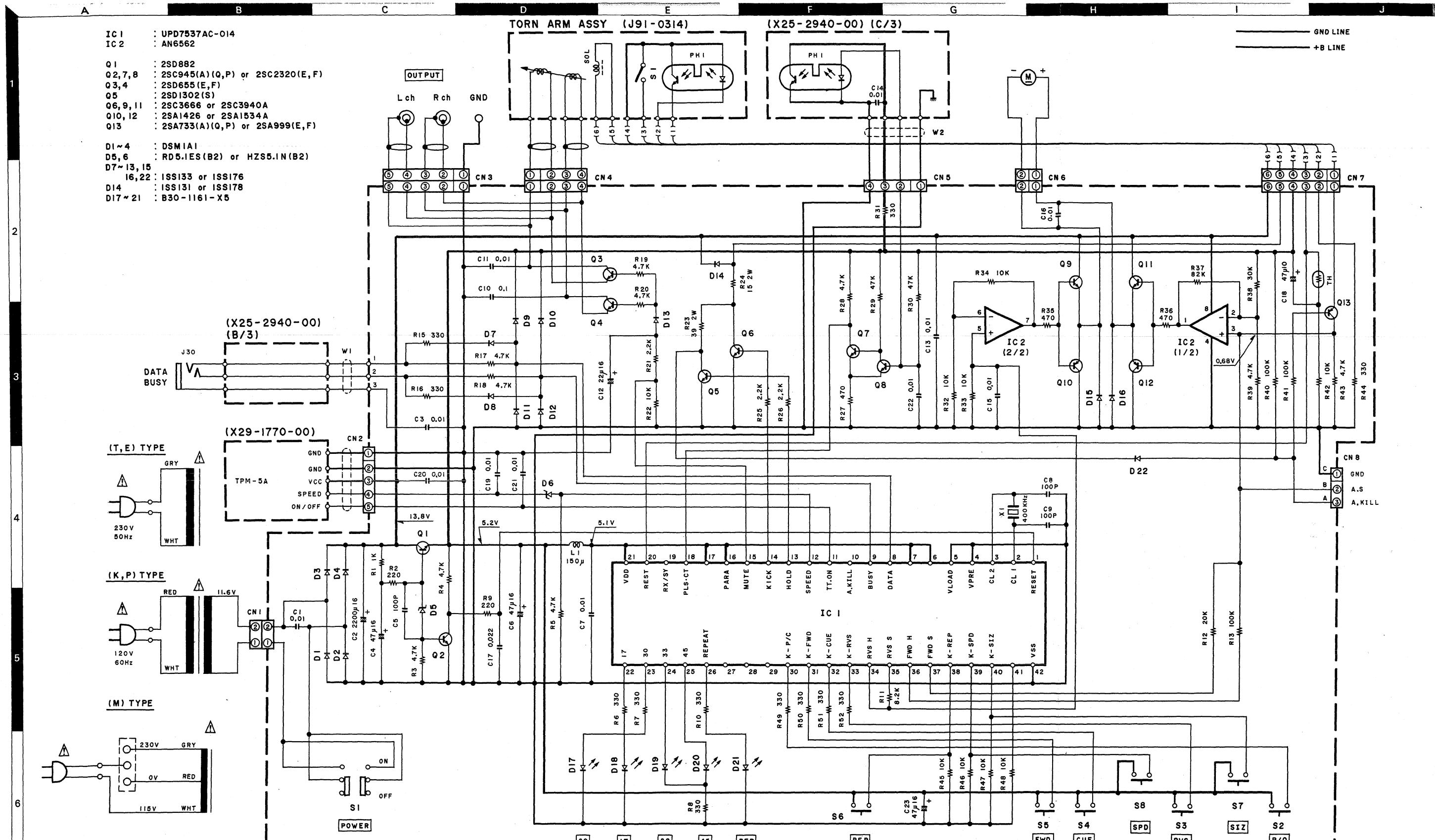
J91-0314

**KD-66F**

Refer to the schematic diagram for the values of resistors and capacitors.



Refer to the schematic diagram for the values of resistors and capacitors.



DC voltages are measured with a high impedance voltmeter at 33-1/3 r.p.m. mode. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance, près de 33-1/3 r.p.m. en mode du lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

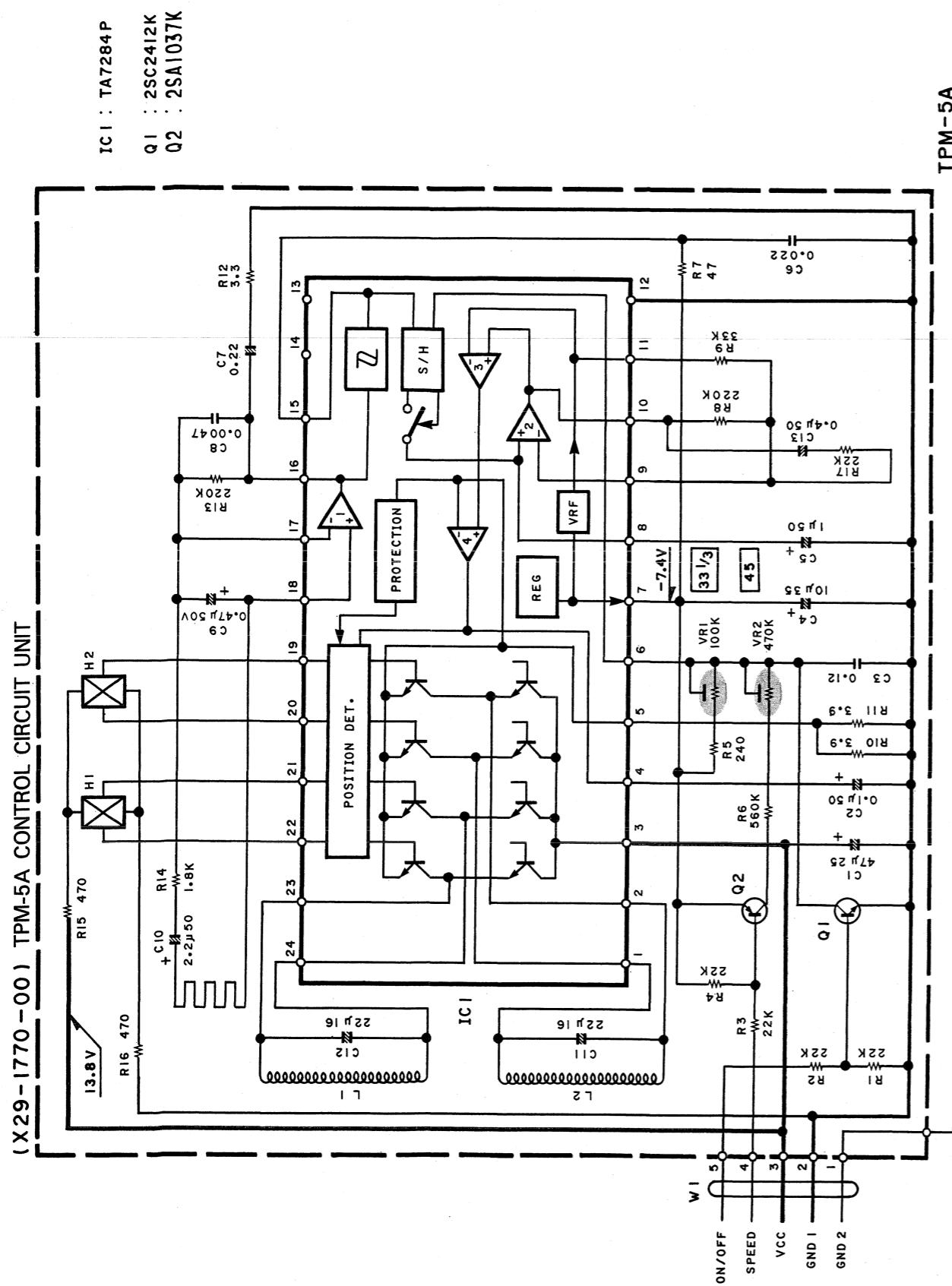
Die angegebenen Gleichspannungswerte wurden bei 33-1/3 r.p.m. in der Wiedergabe mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

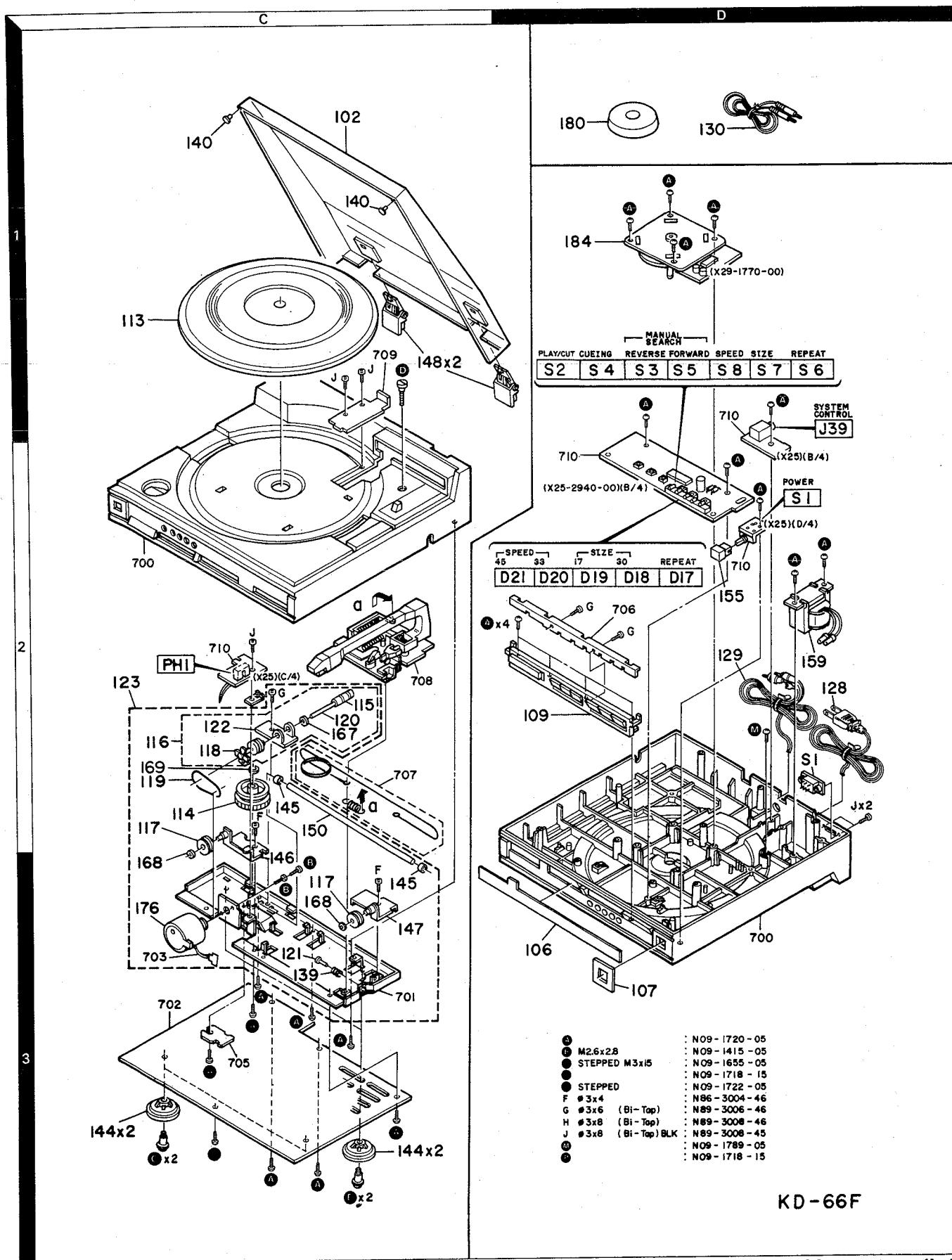
**KD-66F**  
**KENWOOD**

# KD-66F KD-66F

## EXPLODED VIEW (MECHANISM UNIT)



## EXPLODED VIEW (MAIN UNIT)



Parts with the exploded numbers larger than 700 are not supplied.

## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
KD-66F						
102	1C	*	A53-0907-01	DUST COVER	KU1M1	
102	1C	*	A53-0907-01	DUST COVER	UE1T1	
102	1C	*	A53-0907-01	DUST COVER	E1X1K2	
102	1C	*	A53-0907-01	DUST COVER	P1	
106	3D	*	B03-2255-12	DRESSING PLATE (KENWOOD)		
107	3D	*	B03-2256-04	DRESSING PLATE (POWER)		
109	2D	*	B07-1726-02	ESCUTCHEON		
-			B46-0092-03	WARRANTY CARD	KK1K2	
-			B46-0094-03	WARRANTY CARD	U1UE1	
-			B46-0094-03	WARRANTY CARD	U2UE2	
-			B46-0095-03	WARRANTY CARD	U1UE1	
-			B46-0095-03	WARRANTY CARD	U2UE2	
-			B46-0096-13	WARRANTY CARD	X1	
-			B46-0121-03	WARRANTY CARD	P1	
-			B46-0122-13	WARRANTY CARD	E1	
-			B46-0143-03	WARRANTY CARD	T1	
-		*	B50-6694-00	INSTRUCTION MANUAL (ENGLISH)		
-		*	B50-6695-00	INSTRUCTION MANUAL (FRENCH)	M1E1X1	
-		*	B50-6695-00	INSTRUCTION MANUAL (FRENCH)	P1	
-		*	B50-6696-00	INSTRUCTION MANUAL (SPANISH)	M1	
-		*	B50-6698-00	INSTRUCTION MANUAL (G,D,I)	E1	
-			B58-0223-04	CAUTION CARD (PRE-SET 120V)	U1U2	
-			B58-0269-04	CAUTION CARD	KK1K2	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	UE1UE2	
-			B58-0802-04	CAUTION CARD		
-			B59-0092-00	SERVICE DIRECTORY	U1UE1	
-			B59-0092-00	SERVICE DIRECTORY	U2UE2	
113	1C	*	D02-0059-25	TURNTABLE PLATTER ASSY	U1M1	
113	1C	*	D02-0059-25	TURNTABLE PLATTER ASSY	UE1T1	
113	1C	*	D02-0059-25	TURNTABLE PLATTER ASSY	E1X1U2	
113	1C	*	D02-0059-25	TURNTABLE PLATTER ASSY	UE2	
113	1C	*	D02-0060-25	TURNTABLE PLATTER ASSY	KK1K2	
113	1C	*	D02-0060-25	TURNTABLE PLATTER ASSY	P1	
114	2C		D13-0089-14	GEAR		
115	2C		D13-0282-04	WORM		
116	2C		D13-0310-04	WORM ASSY		
117	2C, 3C		D15-0172-04	PULLEY		
118	2C		D15-0200-04	PULLEY (WORM ASSY)		
119	2C		D16-0082-04	BELT		
120	2C		D21-0523-04	SHAFT (WORM ASSY)		
121	3C		D21-1172-05	SHAFT		
122	2C		D23-0167-04	RETAINER		
123	2C	*	D40-0392-02	MECHANISM ASSY		
128	2D		E30-0181-05	AC POWER CORD	KK1K2	
128	2D		E30-0181-05	AC POWER CORD	P1	
128	2D		E30-0459-05	AC POWER CORD	E1	
128	2D		E30-0812-05	AC POWER CORD	U1M1	
128	2D		E30-0812-05	AC POWER CORD	UE1U2	
128	2D		E30-0812-05	AC POWER CORD	UE2	
128	2D		E30-1341-05	AC POWER CORD	X1	
128	2D		E30-1416-05	AC POWER CORD	T1	
129	2D		E30-0977-05	CORD WITH PLUG	KU1M1	

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KD-66F: K

KD-66FCL: K1, U2, UE2

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129	2D		E30-0977-05	CORD WITH PLUG	UE1X1	
129	2D		E30-0977-05	CORD WITH PLUG	K1K2P1	
129	2D		E30-0977-05	CORD WITH PLUG	U2UE2	
130	1D		E30-1378-05	AUDIO CORD	U1M1	
130	1D		E30-1378-05	AUDIO CORD	UE1T1	
130	1D		E30-1378-05	AUDIO CORD	E1X1P1	
130	1D		E30-1378-05	AUDIO CORD	U2UE2	
130	1D	*	E30-1379-05	AUDIO CORD	KK1K2	
139	3C		G01-0675-04	COMPRESSION SPRING	KU1M1	
140	1C		G13-0179-04	CUSHION (DUST COVER)	UE1T1	
140	1C		G13-0179-04	CUSHION	E1X1K2	
140	1C		G13-0179-04	CUSHION	P1	
140	1C		G13-0179-04	CUSHION		
-		*	H01-7548-04	ITEM CARTON CASE	U1M1	
-		*	H01-7548-04	ITEM CARTON CASE	UE1T1	
-		*	H01-7548-04	ITEM CARTON CASE	E1X1K2	
-		*	H01-7548-04	ITEM CARTON CASE	P1	
-		*	H01-7549-04	ITEM CARTON CASE	K	
-		*	H01-7550-04	ITEM CARTON CASE	K1	
-		*	H01-7551-04	ITEM CARTON CASE	U2UE2	
-		*	H10-3427-02	POLYSTYRENE FOAMED FIXTURE(L)		
-		*	H10-3428-02	POLYSTYRENE FOAMED FIXTURE(R)		
-		*	H11-0005-04	POLYSTYRENE FOAMED BOARD		
-			H13-0002-03	CARTON BOARD	KU1UE1	
-			H25-0225-04	PROTECTION BAG (850X450X0.03)	T1E1X1	
-			H25-0225-04	PROTECTION BAG (850X450X0.03)	K1K2P1	
-			H25-0225-04	PROTECTION BAG (850X450X0.03)	U2UE2	
-			H25-0225-04	PROTECTION BAG (850X450X0.03)		
-		*	H25-0232-04	PROTECTION BAG (235X350X0.03)		
-		*	H25-0294-04	PROTECTION BAG		
-		*	H25-0625-04	PROTECTION BAG (620X740X0.03)	M1	
144	3C	*	J02-0196-04	INSULATOR		
145	2C, 3C		J19-2578-04	HOLDER		
146	3C		J21-3906-04	MOUNTING HARDWARE(R)		
147	3C		J21-3907-04	MOUNTING HARDWARE(L)		
148	1C	*	J50-0125-05	HINGE	KU1M1	
148	1C	*	J50-0125-05	HINGE	UE1T1	
148	1C	*	J50-0125-05	HINGE	E1X1K2	
148	1C	*	J50-0125-05	HINGE	P1	
150	2C		J90-0164-05	RAIL		
155	2D		K29-2001-04	KNOB ASSY(BUTTON)POWER		
-			J61-0054-05	WIRE BAND		
-			J61-0307-05	WIRE BAND		
▲ 159	2D	*	L01-7371-05	POWER TRANSFORMER	KK1K2	
▲ 159	2D	*	L01-7371-05	POWER TRANSFORMER	P1	
▲ 159	2D		L01-7372-05	POWER TRANSFORMER	T1E1X1	
▲ 159	2D		L01-7374-05	POWER TRANSFORMER	U1M1	
▲ 159	2D		L01-7374-05	POWER TRANSFORMER	UE1U2	
▲ 159	2D		L01-7374-05	POWER TRANSFORMER	UE2	
167	2C		N19-0333-04	FLAT WASHER (WORM ASSY)		
168	3C		N19-0366-04	FLAT WASHER (PULLY)		
169	2C		N19-0143-04	FLAT WASHER (GEAR)		
A	3C, 3D		N09-1720-05	TAPITIE SCREW		

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B	3C		N09-1415-05	MACHINE SCREW (M2.6X2.8) MOTOR		
C	3C		N09-1655-05	STEPPED SCREW (M3X15) FOOT-F		
D	1C	*	N09-1718-15	MACHINE SCREW		
E	3C		N09-1722-05	STEPPED SCREW (FOOT-R)		
M	2D	*	N09-1789-05	MACHINE SCREW (POWER CORD)		
S1	2D		S31-2083-05	SLIDE SWITCH (POWER TYPE)	U1M1	
S1	2D		S31-2083-05	SLIDE SWITCH (POWER TYPE)	UE1U2	
S1	2D		S31-2083-05	SLIDE SWITCH (POWER TYPE)	UE2	
176	3C		T42-0411-05	MOTOR ASSY		
180	1D		W01-0329-04	EP ADAPTER		
184	1D		X92-1150-00	MOTOR ASSY		
<b>ELECTRIC UNIT (X25-2940-00)</b>						
D17 -21	2D		B30-1161-05	LED (REPEAT, SPEED, SIZE SEL)		
C1			CK45FF1H103Z	CERAMIC 0.010UF Z		
C2			CE04KW1C222M	ELECTRO 2200UF 16WV		
C3			CK45FF1H103Z	CERAMIC 0.010UF Z		
C4			CE04KW1C470M	ELECTRO 47UF 16WV		
C5			CC45FSL1H101J	CERAMIC 100PF J		
C6			CE04KW1C470M	ELECTRO 47UF 16WV		
C7			CK45FF1H103Z	CERAMIC 0.010UF Z		
C8 ,9			CC45FSL1H101J	CERAMIC 100PF J		
C10 ,11			CK45FF1H473Z	CERAMIC 0.047UF Z		
C12			CE04KW1C222M	ELECTRO 22UF 16WV		
C13 -16			CK45FF1H103Z	CERAMIC 0.010UF Z		
C17			CK45FF1H223Z	CERAMIC 0.022UF Z		
C18			CE04KW1A470M	ELECTRO 47UF 10WV		
C19 -22			CK45FF1H103Z	CERAMIC 0.010UF Z		
C23			CE04KW1C470M	ELECTRO 47UF 16WV		
J39	1D		E11-0164-05	MINIATURE PHONE JACK (3P) SYSTEM		
L1			L40-1511-14	SMALL FIXED INDUCTOR (150UH, K)		
X1			L78-0202-05	RESONATOR (400KHZ)		
R23			RS14KB3D390J	FL-PROOF RS 39 J 2W		
R24			RS14KB3D150J	FL-PROOF RS 15 J 2W		
S1	2D		S40-2182-15	PUSH SWITCH (POWER)		
S2 -8	1D		S40-1064-05	PUSH SWITCH (SPEED, MANUAL)		
PH1	2C		T95-0042-05	OPTO ISOLATOR		
D1 -4			DSM1A1	DIODE		
D5 ,6			HZS5.1N(B2)	ZENER DIODE		
D5 ,6			RD5.1ES(B2)	ZENER DIODE		
D7 -13			ISS133	DIODE		
D7 -13			ISS176	DIODE		
D14			ISS131	DIODE		
D14			ISS178	DIODE		
D15 ,16			ISS133	DIODE		
D15 ,16			ISS176	DIODE		
D22			ISS133	DIODE		
D22			ISS176	DIODE		
IC1			UPD7537AC-014	IC (MICROPROCESSOR)		
IC2			AN6562	IC (OP AMP X2)		

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Q1			2SD882	TRANSISTOR				
Q2			2SC2320(E,F)	TRANSISTOR				
Q2			2SC945(A)(Q,P)	TRANSISTOR				
Q3	,4		2SD655(E,F)	TRANSISTOR				
Q5			2SD1302(S)	TRANSISTOR				
Q6			2SC3666	TRANSISTOR				
Q6			2SC3940A	TRANSISTOR				
Q7	,8		2SC2320(E,F)	TRANSISTOR				
Q7	,8		2SC945(A)(Q,P)	TRANSISTOR				
Q9			2SC3666	TRANSISTOR				
Q9			2SC3940A	TRANSISTOR				
Q10			2SA1426	TRANSISTOR				
Q10			2SA1534A	TRANSISTOR				
Q11			2SC3666	TRANSISTOR				
Q11			2SC3940A	TRANSISTOR				
Q12			2SA1426	TRANSISTOR				
Q12			2SA1534A	TRANSISTOR				
Q13			2SA733(A)(Q,P)	TRANSISTOR				
Q13			2SA999(E,F)	TRANSISTOR				
TH1			SDT-65	THERMISTOR				
CONTROL CIRCUIT UNIT (X29-1770-00)								
C1			CE04KW1E470M	ELECTRO	47UF	25WV		
C2			CE04KW1H0R1M	ELECTRO	0.1UF	50WV		
C3			CF92FV1H124J	MF	0.12UF	J		
C4			CE04KW1V100M	ELECTRO	10UF	35WV		
C5			CF92FV1H274J	MF	0.27UF	J		
C6			CF92FV1H223J	MF	0.022UF	J		
C7			CF92FV1H224J	MF	0.22UF	J		
C8			CF92FV1H472J	MF	4700PF	J		
C9			CE04KW1H47M	ELECTRO	0.47UF	50WV		
C10		*	CE04KW1H2R2J	ELECTRO	2.2UF	50WV		
C11	,12		C90-1353-05	NP-ELEC	10UF	25WV		
C13			C90-1331-05	NP-ELEC	0.47UF	50WV		
C14			CF92FV1H103J	MF	0.010UF	J		
J1	-9		R92-0338-05	CLYND CHIP R 0 ΩHM				
R1	-4		RD41FB2B223J	CLYND CHIP R 22K	J	1/8W		
R5			RK73FB2A244J	CHIP R 240K	J	1/10W		
R6			RK73FB2A564J	CHIP R 560K	J	1/10W		
R7			RD41FB2B473J	CLYND CHIP R 47K	J	1/8W		
R8			RD41FB2B224J	CLYND CHIP R 220K	J	1/8W		
R10	,11		RD41FB2B3R9J	CLYND CHIP R 3.9	J	1/8W		
R12			RD41FB2B3R3J	CLYND CHIP R 3.3	J	1/8W		
R13			RD41FB2B224J	CLYND CHIP R 220K	J	1/8W		
R14			RD41FB2B182J	CLYND CHIP R 1.8K	J	1/8W		
R15	,16		RD41FB2B471J	CLYND CHIP R 470	J	1/8W		
R17			RD41FB2B223J	CLYND CHIP R 22K	J	1/8W		
VR1			R12-5046-05	TRIMMING POT. (100K)33RPM				
VR2			R12-6012-05	TRIMMING POT. (470K)45RPM				
H1	,2		T95-0015-15	HOLL ELEMENT (H-300B)				
IC1			TA7284P	IC(MOTOR DRIVER)				
Q1			2SC2412K	TRANSISTOR				
Q2			2SA1037K	TRANSISTOR				

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KD-66FC1: K1, U2, UE2

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TONEARM ASSY (J91-0320-50) UE TYPE (J91-0328-05)						
1	3A		D14-0101-08	ROLLER		
2	2A		D21-1158-08	SHAFT		
3	2B		D21-1159-08	SHAFT (ARM)		
7	1A		G01-1918-08	EXTENSION SPRING		
8	1B		G01-1919-08	EXTENSION SPRING(TONEARM)		
9	2B		G01-1920-08	COMPRESSION SPRING		
10	2B		G01-1921-08	COMPRESSION SPRING		
11	1B		G01-1922-08	COMPRESSION SPRING(TONEARM)		
15	1B	*	J91-0319-08	PICKUP ARM		
18	1A	*	N14-0177-08	HEXAGON NUT	KU1M1	
18	1A	*	N14-0177-08	HEXAGON NUT	UE1T1	
18	1A	*	N14-0177-08	HEXAGON NUT	E1X1K1	
18	1A	*	N14-0177-08	HEXAGON NUT	P1U2	
18	1A	*	N14-0177-08	HEXAGON NUT	UE2	
Q	1A	*	N09-1778-08	MACHINE SCREW	KU1M1	
Q	1A	*	N09-1778-08	MACHINE SCREW	UE1T1	
Q	1A	*	N09-1778-08	MACHINE SCREW	E1X1K1	
Q	1A	*	N09-1778-08	MACHINE SCREW	P1U2	
Q	1A	*	N09-1778-08	MACHINE SCREW	UE2	
S1	3B		S50-1038-05	MICRO SWITCH		
22	1A		T21-0138-05	PICKUP CARTRIDGE	KU1M1	
22	1A		T21-0138-05	PICKUP CARTRIDGE	UE1T1	
22	1A		T21-0138-05	PICKUP CARTRIDGE	E1X1K1	
22	1A		T21-0138-05	PICKUP CARTRIDGE	P1U2	
22	1A		T21-0138-05	PICKUP CARTRIDGE	UE2	
23	3A		T94-0050-05	MAGNETIC PLUNGER		
PH1	2B		T95-0019-05	OPTO ISOLATOR		

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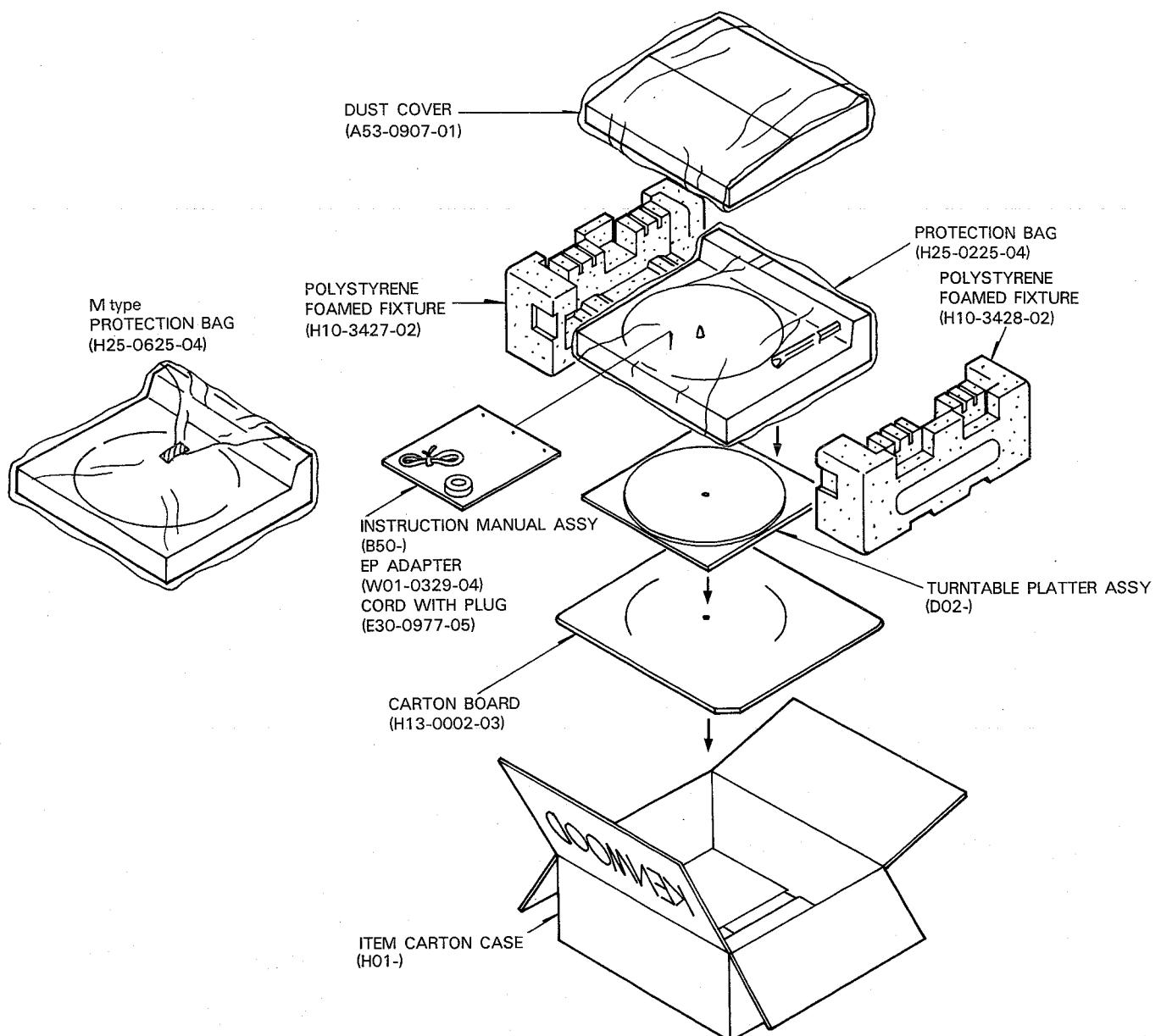
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## PACKING



**D-66F**

# SPECIFICATIONS

**Motor and Turntable**

Drive System	Direct-drive system
Motor	Coreless & slotless FG servo motor
Turntable Platter	29.4 cm (11-9/16") diameter 1.1 kg (2.4 lb) weight
Speeds	2 speeds, 33-1/3 and 45 rpm
Wow & Flutter	0.025% (WRMS) DIN: 0.05%
S/N (Rumble)	DIN: 40 dB (DIN A) DIN: 75 dB (DIN B)

**Tonearm**

Type	Linear tracking tonearm
Tracking Error	±0.2°
Usable Cartridge	T4P

**Cartridge**

Furnished Cartridge	T4P MM cartridge (V-67)
Frequency Response	20 ~ 20,000 Hz
Channel Separation	Better than 22 dB (1,000 Hz)
Output Voltage	2.5 mV (1,000 Hz, 5 cm/sec.)
Output Balance	2.0 dB (1,000 Hz, 5 cm/sec.)

**Note:**

We follow a policy of continuous advancements in development. For this reason specifications may be changed without notice.

**Model name and its accessories list**

Model name	Accessories	Cartridge	Dust cover
KD-66F P1, U1, UE1, M1, X1, T1, E1	○	○	○
KD-66F K2 type	×	○	○
KD-66FC K type	○	○	○
KD-66FCL K1, U2, UE2 type	○	×	

**Note:**

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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**KENWOOD ELECTRONICS CANADA INC.**

P.O. Box 1075 959 Gana Court, Mississauga, Ontario, Canada L4T 4C2

**KENWOOD ELECTRONICS BENELUX N.V.**

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**KENWOOD ELECTRONICS DEUTSCHLAND GMBH**

Rembrucker Str. 15, 6056 Heusenstamm, West Germany

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